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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,299	08/27/2003	Hisaaki Wakao	241973US2	4869

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ALEXANDRIA, VA 22314

EXAMINER

MARC, MCDIEUNEL

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 04/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/648,299	<b>Applicant(s)</b> WAKAO ET AL.	
	<b>Examiner</b> McDieunel Marc	<b>Art Unit</b> 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/25/2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-21 is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/25/2004</u> | 6) <input type="checkbox"/> Other: _____  |

RD

**DETAILED ACTION**

1. Claims 1-21 are presented for examination.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by **Nishida et al.** (U.S. PG Pub. No. 20010027907 A1).

As per claims 1 and 9, Nishida *et al.* teaches a system and an associated method having a hunting detecting device for an electrical load controlling device, wherein the electrical load controlling device sets a current command value for an electrical load, wherein, based on a deviation between a current that actually flows through the electrical load and the current command value, the electrical load controlling device performs at least proportional control in a group including proportional control, integral control, and differential control, wherein the electrical load controlling device sends a current generated based on the performed control to the electrical load (see figs. 1, 2 and 8), the hunting detecting device comprising: a current determining device, which determines whether there is a current through the electrical load (see page 1, sections [0005]); and a hunting detector, wherein, when the current determining device determines that there is a current through the electrical load, the hunting detector detects the number of times of hunting occurs within a predetermined period (see page 1, section [0009-0015] and page 6, sections [0066-0071]).

As per claims 2 and 10, Nishida *et al.* teaches a system and an associated method, wherein a duty ratio determining device for determining whether a duty ratio related to the current is less than a predetermined threshold value; and a counter device, which accumulates the number of times the duty ratio determining device determines that the duty ratio is less than the predetermined threshold value (see page 4, section [0046] and page 5, sections [0058-0059]).

As per claims 3, Nishida *et al.* teaches a system that further comprising an abnormality determining device, wherein, when the cumulative number accumulated by the counter device is at least an abnormality determination value, the abnormality determining device determines that there is an abnormality (see page 4, section [0047] and page 5, sections [0058-0059]).

As per claims 4, 5, 11 and 12, Nishida *et al.* teaches a system and an associated method, wherein a short circuit detecting device further comprising: a short circuit determining device, wherein, when the number of times of hunting exceeds a

predetermined number, the short circuit determining device determines that there is a short circuit in the electrical load (see abstract and page 1, sections [0006-0007 and 0072]).

As per claim 6, Nishida *et al.* teaches a system wherein the short circuit detecting device includes an electrical power source, a relay device, and a relay controlling device, wherein the electrical load is connected to the electrical power source with the relay device, and wherein, when the short circuit determining device determines that there is a short circuit in the electrical load, the relay controlling device turns off the relay device (see fig. 1, page 1, sections [0006-0007, 0072] and page 4, section [0050]).

As per claim 7, Nishida *et al.* teaches a system that further comprising a warning device, wherein, when the short circuit determining device determines that there is a short circuit in the electrical load, the warning device warns of existence of the short circuit (see fig. 1, page 4, sections [0045-0046 and 0050]).

As per claim 8, Nishida *et al.* teaches a system wherein the driving force distribution controlling device controls a driving force distributing device that adjusts a ratio of driving force that is distributed from a power source of a vehicle to front wheels and rear wheels of the vehicle via a driving force transmitting system, wherein the driving force distributing device includes an electrical load for adjusting the ratio of the driving force (see sections [0026, 0034 and 0044]); and wherein the driving force distribution controlling device functions as the electrical load controlling device (see sections [0026, 0034, 0038-0039, 0044]).

***Allowable Subject Matter***

4. Claims 13-21 are allowed.

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5. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fail to teach or fairly suggest a driving force distribution controlling device for a four wheel drive vehicle, wherein the driving force distribution controlling device controls an inductive load circuit that adjusts a ratio of driving force that is distributed from a power source to a plurality of wheels via a driving force transmitting system, the driving force distribution controlling device wherein after a first timer device completes measuring, a test current outputting device outputs a test current to the inductive load circuit; a counting device, wherein, while the test current is being outputted, the counting device counts the number of times the current detected by the detecting device exceeds a first threshold value. . . in combination with the other features of the claimed invention.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to McDieunel Marc whose telephone number is (571) 272-6964. The examiner can normally be reached on 6:30-5:00 Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

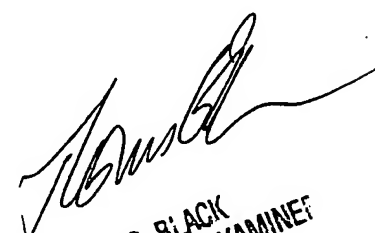
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
McDiannel Marc

Thursday, April 07, 2005

MM/

  
THOMAS G. BLACK  
SUPERVISORY PATENT EXAMINER  
GROUP 3600